

INFECTIOUS DISEASE WAIVERS

CONDITION: Human Immunodeficiency Virus (HIV) INFECTION (ICD9 795.8)

Revised November 2001

AEROMEDICAL CONCERNS: Persons with HIV infection are at risk for multiple complications including HIV encephalopathy, opportunistic infections, and malignancies. Treatment of HIV infection requires the use of at least three antiretroviral medications with multiple side effects and drug interactions. Mandatory restrictions on deployability preclude operational assignment for those individuals affected.

WAIVERS: To date, no waivers for HIV have been recommended for rated aircrew. Civilian ATCs and aircrew members will be considered on a case-by-case basis and may be granted restricted duties if completely asymptomatic with frequency of monitoring to be determined individually for each case.

INFORMATION REQUIRED: AR 600-110, Identification, Surveillance, and Administration of Personnel Infected with Human Immunodeficiency Virus (HIV), guides management of HIV positive individuals. Submission of a complete and current clinical staging along with CD4 Cell count and plasma HIV RNA level (viral load) and any medication regimen is required for any waiver consideration

FOLLOW-UP: Annual follow-up at a MEDCEN or equivalent for reevaluation is required.

TREATMENT: Treatment is disqualifying. The adoption of highly active antiretroviral therapy (HAART) with a three drug regimen has resulted in much improvement in short-term survival rates. The recommended regimens involve the use of two nucleoside reverse transcriptase inhibitors (N-RTI) plus either a protease inhibitor (PI) or efavirenz, a non-nucleoside reverse transcriptase inhibitor (NN-RTI). Drug regimens involving less than three antiretroviral drugs are contraindicated. Some of the potential side effects of these regimens include anemia, leukopenia, thrombocytopenia, hepatitis, pancreatitis, peripheral neuropathy, lactic acidosis, rash, diarrhea, abdominal pain, nephrolithiasis glucose intolerance, hyperlipidemia, etc. The regimen for timing and storage of medication is complex and requires strict adherence.

DISCUSSION: Neurological infection heralds HIV infection in 10-20% of patients. Following the acute viral syndrome characterizing initial infection with the virus, a variety of neurologic disorders may develop. Aseptic meningitis, encephalitis, brachial plexopathy, and a multiple sclerosis-like illness have been observed. Several groups have demonstrated neuropsychologic dysfunction in asymptomatic HIV-1 positive patients. Abnormalities in gaze pursuit movements have also been reported. Late in the course of the disease, the CNS is the target for opportunistic infections, as well as effects attributed

to the virus itself. HIV encephalopathy results in cognitive and motor deficits that can impair the ability to fly aircraft.

The mean incubation time between HIV-1 infection and symptomatic AIDS for adults is at 8-10 years. An estimated 100% of those infected with HIV-1 but not treated with HAART will progress to AIDS given sufficient time. The indications for initiation of HAART can occur years before the development of symptomatic AIDS. Initiation of HAART is recommended when the CD4 lymphocyte count is less than 350 cells/mm³ and /or the HIV viral load is greater than 55,000/ml copies by reverse transcriptase polymerase chain reaction (RT-PCR). Treatment with HAART improves survival in AIDS patients and may slow onset to symptomatic AIDS. However, the side effects associated with HAART severely limit its compatibility with duty involving flying.

AIDS-defining events have changed radically since the disease was first described. In someone whose HIV-1 status is known to be positive, the list of conditions defining the transition to AIDS is broad. The treatment and prophylaxis of AIDS-related opportunistic infections have improved. The prophylactic medications also have many side effects. Some antiretroviral agents, especially the PIs have drug interactions with AIDS-related prophylactic medications and medication for non HIV-related conditions.

REFERENCE: HIV/AIDS Treatment Information Service: <http://www.hivatis.org>